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Abstract of the Disclosure

An array of relief cuts is formed at the flexion points of an expandable stent. The relief cuts are small enough to preserve the columnar compressive strength of the stent. The relief cuts allow a balloon expandable stent to be expanded with less balloon pressure. The relief cuts allow the use of wider and thinner material in the stent, giving greater radio-opacity and vessel coverage while simultaneously reducing the stent profile and increasing laminar blood flow through the stented vessel. Patterns of relief cuts may be placed in stents to achieve controlled, non-uniform expansion and which, in some instances, allow the stent to bend easily in a given direction to facilitate deployment in curved arteries or other body lumens.